

Amendments to the Specification

Please replace the paragraph at page 7, line 23 through page 8, line 2 with the following amended paragraph:

In the low-frequency filter amplifier 6, the capacitors C1, C2, and C7 together with the resistors R12 and R13 function as a two-pole, active, low-pass filter with ~~the frequency range (-3dB) of about 1.5 Hz to 8 kHz;~~ a rise beginning at about 500 Hz and having a peak at about 10kHz. ~~The~~ the capacitor C10 functions as the negative feedback 7. The resistor R11 together with the capacitor C10 function as a one-pole high-pass filter with the frequency cutoff (-3dB) of about 1.5 Hz, for the low-frequency filter amplifier 6. The resistors R3 and R4 together with the capacitor C9 function as a one-pole low-pass pre-filter with the frequency cutoff (-3dB) of about 460 Hz, for the low-frequency filter amplifier 6. Thus, the composite low-pass filter has a frequency range (-3dB) of about 1.5 Hz to 8 kHz.

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Please add the following new paragraph at page 7, line 8:

The input impedance of the low frequency channel circuit 2 is equal to the parallel combination of R11 and the gate resistance of J6 (i.e., $(R_{J6} \cdot R11) / (R_{J6} + R11) \approx 200 \text{ Mohm}$). Similarly, the input impedance of the high frequency channel circuit 4 is equal to the parallel combination of R21 and the input impedance of U1 (i.e., $(R_{U1} \cdot R21) / (R_{U1} + R21) \approx 200 \text{ Mohm}$).